



<b>Licence Number</b>	L6266/1991/10
<b>Licence Holder</b>	Water Corporation of Western Australia
<b>Registered business address</b>	629 Newcastle Street LEEDERVILLE WA 6007
<b>File Number</b>	DER2014/000608
<b>Duration</b>	1/01/2012 to 31/12/2025
<b>Date of amendment</b>	13/09/2022
<b>Prescribed Premises</b>	Category 54 Category 61
<b>Premises</b>	Broome South Sewage Facility 34 Clementson Street MINYIRR WA 6725  Legal description - Lot 1639 on Plan 184761 and Lot 512 on Plan 409418 As defined by the map in Schedule 1 of this Licence

This Licence is granted to the Licence Holder, subject to the following conditions, on 13 September 2022, by:

Abbie Crawford  
A/MANAGER, WASTE INDUSTRIES  
*Officer delegated under section 20 of the Environmental Protection Act 1986*

## Explanatory notes

These explanatory notes do not form part of this Licence.

### Defined terms

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Definition of terms used in this Licence can be found at the start of this Licence. Terms which are defined have the first letter of each word capitalised throughout this Licence.

### Department of Water and Environmental Regulation

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The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986* (WA) (EP Act). The Department also monitors and audits compliance with licences, takes enforcement action and develops and implements licensing and industry regulation policy.

### Licence

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Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased, or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered, or permitted to be altered, from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987* (WA) (EP Regulations).

This Licence does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the *Waste Avoidance and Resource Recovery Act 2007*;
- any requirements under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
- any other requirements specified through State legislation.

It is the responsibility of the Licence Holder to ensure that any action or activity referred to in this Licence is permitted by, and is carried out in compliance with, other statutory requirements.

The Licence Holder must comply with the Licence. Contravening a Licence Condition is an offence under s.58 of the EP Act.

### Responsibilities of a Licence Holder

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Separate to the requirements of this Licence, general obligations of Licence Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Licence Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under section 61; and
- restrictions on making certain changes to Prescribed Premises unless the changes are in accordance with a works approval, Licence, closure notice or environmental protection notice (s.53).

Strict penalties apply for offences under the EP Act.

## Reporting of incidents

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The Licence Holder has a duty to report to DWER all discharges of waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

## Offences and defences

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The EP Act and its regulations set out a number of offences, including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)*.
- Offences relating to noise under the *Environmental Protection (Noise) Regulations 1997 (WA)*.

Section 53 of the EP Act provides that a Licence Holder commits an offence if Emissions are caused, or altered from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a Closure Notice or an Environmental Protection Notice.

Defences to certain offences may be available to a Licence Holder and these are set out in the EP Act. Section 74A(b)(iv) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Licence Holder can prove that an Emission or Discharge occurred in accordance with a Licence.

This Licence specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of Specified Emissions and Discharges, in order for the defence to offence provision to be available.

## Authorised Emissions and Discharges

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The Specified and General Emissions and Discharges from Primary Activities conducted on the Prescribed Premises are authorised to be conducted in accordance with the Conditions of this Licence.

Emissions and Discharges caused from other activities not related to the Primary Activities at the Premises have not been conditioned in this Licence. Emissions and Discharges from other activities at the Premises are subject to the general provisions of the EP Act.

## Amendment of licence

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The Licence Holder can apply to amend the Conditions of this Licence under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Licence at any time on the initiative of the CEO without an application being made.

Amendment Notices constitute written notice of the amendment in accordance with s.59B(9) of the EP Act.

### Duration of Licence

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The Licence will remain in force for the duration set out on the first page of this Licence or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

### Suspension or revocation

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The CEO may suspend or revoke this Licence in accordance with s.59A of the EP Act.

### Fees

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The Licence Holder must pay an annual licence fee. Late payment of annual licence fees may result in the licence ceasing to have effect.

# Definitions and interpretation

## Definitions

In this Licence, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
AACR	means Annual Audit Compliance Report as defined within the <i>Guideline: Annual Audit Compliance Reports and Guidance Statement: Publication of Annual Audit Compliance Reports</i>
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act.
Annual Period	means a 12 month period commencing from 1 July until 30 June in the following year.
AS 1289	means the Australian Standard AS1289 <i>Method for testing soil for engineering purposes</i>
AS 3798	means the Australian Standard AS 3798-2007, <i>Guidelines on Earthworks for Commercial and Residential Development</i>
AS/NZS 2031	means the Australian Standard AS/NZS 2031 <i>Selection of containers and preservation of water samples for microbiological analysis</i>
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of ground waters</i>
Books	has the same meaning given to that term under the EP Act.
Broome North WWTP	means the Broome North Wastewater Treatment Facility (Part V licence number L9094/2017/1).
Carrier	has the same meaning given to that term under the Controlled Waste Regulations

Term	Definition
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 10, Joondalup DC JOONDALUP DC WA 6919 or <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Condition	means a condition to which this Licence is subject under s.62 of the EP Act.
Controlled Waste Regulations	means the <i>Environmental Protection (Controlled Waste) Regulations 2004</i> (WA)
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Licence Holder in writing and sent to the Licence Holder's address for notifications, as described at the front of this Licence, in relation to: (a) compliance with the EP Act or this Licence; (b) the Books or other sources of information maintained in accordance with this Licence; or (c) the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation.
Emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment requirements has been met in accordance with the licence.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986</i> (WA).
EP Regulations	means the <i>Environmental Protection Regulations 1987</i> (WA).

Term	Definition
Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Licence	refers to this document, which evidences the grant of a Licence by the CEO under s.57 of the EP Act, subject to the Conditions.
Licence Holder	refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
NATA	means the National Association of Testing Authorities, Australia
NATA Accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Licence applies, as specified at the front of this Licence and as shown on the map in Schedule 1 to this Licence.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Primary Activities	refers to the Prescribed Premises activities listed on the front of this Licence as described in Schedule 2, at the locations shown in Schedule 1.
Reuse Facilities	<p>means premises that receive Treated Sewage for reuse and includes the locations:</p> <ul style="list-style-type: none"> <li>• Lot 2827 on Plan 190924, Cable Beach Road East, Broome, being the Broome Recreational and Aquatic Centre;</li> <li>• Lot 2604 on Plan 189084, Fredrick Street, Broome, being Haynes Oval;</li> <li>• Lot 949 on Plan 174296, 3 Port Drive, Broome, being St Mary's College; and</li> <li>• location Lot 510 and 511 on Plan 409418, 224 Port Drive, Minyirr, being the Broome Golf Cub.</li> </ul>

Term	Definition
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Sewage Treatment System	means the system for treating sewage at the Premises that comprises of the Primary Pond with four aerators, Secondary Pond, Tertiary pond, Storage Pond, chlorination and filtration system.
Treated Sewage	means sewage that has been treated by the Sewage Treatment System
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Waste	has the same meaning given to that term under the EP Act.

## Interpretation

In this Licence:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a Condition, each row in a table constitutes a separate Condition;
- (d) any reference to an Australian or other standard, guideline or code of practice in this Licence means the version of the standard, guideline or code of practice in force at the time of granting of this Licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Licence; and
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.



# Conditions

## Emissions and Discharges

1. The Licence Holder must not cause any Emissions from the Primary Activities on the Premises except for Specified Emissions and General Emissions described in Column 1 of Table 2 subject to the exclusions/ limitations/ requirements specified in Column 2 of Table 2.

**Table 2: Authorised Emissions and Discharges table.**

Column 1	Column 2
Emission/ Discharge type	Exclusions/ Limitations/ Requirements
<b>Specified Emissions/ Discharge</b>	
(a) Discharge of Waste through seepage at the Premises.	(i) Seepage from the Secondary Pond and Tertiary Pond subject to compliance with Conditions 4, 5 and 6 of this Licence.
<b>General Emissions/ Discharges (excluding Specified Emissions/ Discharge)</b>	
(b) Emissions that arise from the Primary Activities set out in Schedule 2.	<p>Emissions excluded from General Emissions are:</p> <ul style="list-style-type: none"> <li>(i) Unreasonable Emissions; or</li> <li>(ii) Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or</li> <li>(iii) Discharges of Waste in circumstances likely to cause Pollution; or</li> <li>(iv) Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or</li> <li>(v) Emissions or Discharges which do not comply with an Approved Policy; or</li> <li>(vi) Emissions or Discharges which do not comply with a prescribed standard; or</li> <li>(vii) Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or</li> <li>(viii) Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</li> </ul>

## Waste classification, acceptance and throughput

2. The Licence Holder must only accept onto the Premises Waste that is of a Waste type specified in in Table 3 that does not exceed the corresponding Approved capacity and that meets the corresponding Waste specification as set out in Table 3.

**Table 3: Waste types and quantities authorised to be accepted onto the Premises.**

Waste type	Approved capacity	Waste specification
Sewage	2,000 m <sup>3</sup> per day	Accepted from: <ul style="list-style-type: none"><li>• sewer inflows; or</li><li>• a Carrier</li></ul>
Septage wastes; Waste from grease traps; and Waste oil and water, or hydrocarbons and water, mixtures or emulsions	1,000 m <sup>3</sup> per annual period	Accepted from a Carrier

## Waste processing

3. The Licence Holder must:
- direct all sewage inflow and liquid waste to a primary pond for aerobic and anaerobic facultative treatment;
  - direct all wastewater from the primary ponds to the secondary pond for maturation treatment;
  - direct all wastewater from the secondary pond to the tertiary pond for maturation treatment;
  - direct all wastewater from the tertiary pond to the storage pond; and
  - direct all wastewater from the storage pond to the recycled water storage tanks and maintain chlorine dosing at the outlet of the recycled water storage tanks; and
  - direct all wastewater from the recycled water storage tanks through the filtration units.
4. The Licence Holder must not store sludge from the Sewage Treatment System at the Premises.

## Infrastructure and equipment

### Works

5. The Licence Holder must ensure that the Works specified in Column 1 of Table 4 are designed and constructed to meet or exceed the specifications in Column 2 of Table 4.
6. The Licence Holder must:
  - (a) must submit a report to the CEO by 19 May 2020 that details:
    - (i) how the Works specified in Column 1 of Table 4 are designed and will be constructed to meet or exceed the specifications in Column 2 of Table 4; and
    - (ii) how the operations of the Sewage Treatment System will be maintained while Works specified in Condition 5 are undertaken.
  - (b) complete the works for and commission the Tertiary Pond with a low permeability liner by 31 October 2021;
  - (c) complete the works for the Secondary Pond with a low permeability liner by 31 October 2022; and
  - (d) not depart from the specifications in Table 4 except:
    - (i) where such departure is minor in nature and does not materially change or affect the infrastructure; or
    - (ii) where such departure does not increase risks to public health, public amenity, water resources or the environment;and all other Conditions in this Licence are complied with, or:
  - (e) Should the Licence Holder wish to propose alternatives to lining the tertiary and secondary ponds that will satisfactorily control the identified risks to groundwater and Roebuck Bay, the Licence Holder should submit a plan by 31 May 2020 to DWER that includes details of the proposed alternatives, evidence of how the alternatives will address the risks and timeframes for completion of works which must be consistent with the dates identified in Condition 6 (b) and (c).

### Operations

7. The Licence Holder must ensure that the Premises infrastructure and equipment specified in Table 4 and Table 5 is maintained in good working order and operated in accordance with the Infrastructure and equipment specifications and operational requirements specified in Table 5.

**Table 4: Infrastructure and equipment Works table.**

Works (Infrastructure and equipment)	Specifications
<p><b>(1)</b> Installation of a low permeability liner within the Tertiary Pond; and</p> <p><b>(2)</b> Installation of a low permeability liner within the Secondary Pond.</p>	<p>The Licence Holder must ensure that:</p> <p><b>(a)</b> the Secondary Pond and Tertiary Pond are lined with a geosynthetic clay liner that is fit for purpose and meets or exceeds the following specifications:</p> <ul style="list-style-type: none"> <li><b>(i)</b> covers the entire pond floor and wall embankments with surrounding perimeter anchor trench tie-in;</li> <li><b>(ii)</b> is a minimum 6 mm thick and has a hydraulic conductivity of less than <math>2 \times 10^{-11}</math> m/s; and</li> <li><b>(iii)</b> has perimeter anchor trenches set a minimum 1.25 m back from the pond wall embankment that are a minimum 500 mm deep and the geosynthetic clay liner toe is secured under a minimum 500 mm of anchor trench backfill.</li> </ul> <p><b>(b)</b> an effective and fit for purpose leakage detection system must be installed below each liner for the Secondary Pond and Tertiary Pond.</p> <p><b>(c)</b> prior to installation of the geosynthetic clay liner:</p> <ul style="list-style-type: none"> <li><b>(i)</b> the sub-grade must be compacted in layers &gt;100mm and &lt;300 mm to a minimum of 95% Standard Maximum Dry Density in accordance with AS 1289.5.1.1;</li> <li><b>(ii)</b> all surfaces must have no irregularities &gt;40 mm deep over a 3 m section and no irregularities &gt;10 mm deep over a 20 mm section; and</li> <li><b>(iii)</b> earthworks must be inspected, approved and reported in accordance with AS 3798 level 1 geotechnical testing.</li> </ul> <p><b>(d)</b> the geosynthetic clay liner:</p> <ul style="list-style-type: none"> <li><b>(i)</b> must be comprised of a reinforced, dry bentonite encapsulated by two geotextile layers;</li> <li><b>(ii)</b> must not be placed during rainfall events, on wet subbase or left exposed overnight;</li> <li><b>(iii)</b> must be placed with no damage;</li> <li><b>(iv)</b> panel overlaps must be a minimum of 300 mm for longitudinal overlap, be a minimum of 500 mm for end of roll overlap; and not have end or roll overlaps on the pond embankments; and</li> <li><b>(v)</b> a soil cover layer of 300 mm thick is placed over the geosynthetic clay liner and compacted.</li> </ul> <p><b>(e)</b> Construction quality assurance of the sub-grade and geosynthetic clay liner is completed by an independent third party for:</p> <ul style="list-style-type: none"> <li><b>(i)</b> level 1 inspection and geotechnical testing, as per AS 3798;</li> <li><b>(ii)</b> geosynthetic clay liner minimum material construction quality assurance testing; and</li> <li><b>(iii)</b> compliance with the specifications under Condition 5, Table 4, specifications (a), (b) and (c).</li> </ul>

**Table 5: Infrastructure and equipment controls table.**

Infrastructure and equipment	Infrastructure and equipment specifications	Operational requirements
Sewage inflow, outflow and conveyance pumps and pipes.	(a) None applicable.	(i) Maintained free of leak and defect.
Primary Pond	<p>(a) Pond liner: Geosynthetic clay liner maintained with a hydraulic conductivity of <math>\leq 1 \times 10^{-9}</math> m/s.</p> <p>(b) Pond profile:</p> <ul style="list-style-type: none"> <li>• floor level of 4.3 mAHD;</li> <li>• storage capacity of 35,000 m<sup>3</sup> at TWL; and</li> <li>• TOB level of 13.3 mAHD.</li> </ul> <p>(c) Top of pond embankments sloped to direct stormwater away from the ponds.</p>	<p>(i) Ponds are managed to ensure:</p> <ul style="list-style-type: none"> <li>• a minimum 445 mm freeboard.</li> <li>• a pH value of sewage/ wastewater in the range of 6.5 pH units to 9.5 pH units is maintained.</li> </ul>
Secondary Pond	<p>(a) Pond liner: as specified by Condition 5 and Table 4.</p> <p>(b) Pond profile:</p> <ul style="list-style-type: none"> <li>• floor level of 10 mAHD;</li> <li>• storage capacity of 35,3484 m<sup>3</sup> at TWL; and</li> <li>• TOB level of 12.815 mAHD.</li> </ul> <p>(c) Top of pond embankments sloped to direct stormwater away from the ponds.</p>	<p>(i) Ponds are managed to ensure:</p> <ul style="list-style-type: none"> <li>• a minimum 300 mm freeboard</li> <li>• a pH value of sewage/ wastewater in the range of 6.5 pH units to 9.5 pH units is maintained.</li> </ul>
Tertiary Pond	<p>(a) Pond liner: as specified by Condition 5 and Table 4.</p> <p>(d) Pond profile:</p> <ul style="list-style-type: none"> <li>• floor level of 9 mAHD;</li> <li>• storage capacity of 61,965 m<sup>3</sup> at TWL; and</li> <li>• TOB level of 12.765 mAHD.</li> </ul> <p>(b) Top of pond embankments sloped to direct stormwater away from the ponds.</p>	
Storage Pond	<p>(a) Pond liner: Geosynthetic clay liner maintained with a hydraulic conductivity of <math>\leq 2 \times 10^{-10}</math> m/s.</p> <p>(e) Pond profile:</p> <ul style="list-style-type: none"> <li>• floor level of 8.4 mAHD;</li> <li>• storage capacity of 58,409 m<sup>3</sup> at TWL; and</li> <li>• level at spillway to the environment of 12.392 mAHD.</li> </ul> <p>(b) Top of pond embankments sloped to direct stormwater away from the ponds.</p>	(i) Pond is managed to ensure a minimum 492 mm freeboard.
Emergency	(a) Emergency Pond 1 profile:	(i) Sewage/ wastewater and/ or

Ponds 1 and 2	<ul style="list-style-type: none"> <li>• floor level of 10.3 mAHD;</li> <li>• storage capacity of 7,910 m<sup>2</sup>; and</li> <li>• TOB level of 12.5 mAHD.</li> </ul> <p><b>(b)</b> Emergency Pond 2 profile:</p> <ul style="list-style-type: none"> <li>• floor level of 10.3 mAHD;</li> <li>• storage capacity of 3,900 m<sup>2</sup>; and</li> <li>• OB level of 12.5 mAHD</li> </ul> <p><b>(c)</b> Top of pond embankments sloped to direct stormwater away from the ponds.</p>	Treated Sewage must not be stored within Emergency Storage Pond 1 and Emergency Storage Pond 2 for more than 3 months within an Annual Period.
Chlorination and filtration system	<p><b>(a)</b> Chlorinator with a duty and standby storage tanks.</p> <p><b>(b)</b> Two filter sets of two Filtomat coarse screen filter sets, for the Reuse Facilities.</p> <p><b>(c)</b> Filter backwash must be returned to the Primary Pond.</p>	<b>(i)</b> Maintained free of leak and defect.
Treated sewage reuse pumping station	<b>(a)</b> Pumps with a minimum capacity of 20 L/s.	<b>(i)</b> Maintained free of leak and defect.
Volumetric flow meters	<b>(a)</b> Electronic Magflow meters.	<b>(i)</b> Maintained free of leak, defect and calibrated in accordance with manufacturers specifications annually.
Groundwater monitoring bores	<b>(a)</b> Groundwater monitoring bores located and labelled in accordance with Condition 13 of this Licence.	<b>(i)</b> Maintain free of obstruction and defect.

### Management for extreme rainfall events

8. The Licence Holder must ensure that Emergency Pond 1 and Emergency Pond 2 are emptied of wastewater during October in each calendar year.
9. The Licence Holder must ensure that the Storage Pond has a minimum Freeboard of 492 mm at the end of October in each calendar year.
10. The Licence Holder must, as required, limit sewerage inflows to the premises to prevent overtopping of Emergency Ponds 1 and 2.

### Decommissioning

11. The Licence Holder must ensure that the Works specified in Table 6 are undertaken to meet or exceed the specifications and requirements in Table 6.

**Table 6: Emergency Pond 3 Decommissioning Works**

Infrastructure and equipment works	Works specifications	Works requirements
Emergency Pond 3 Decommissioning	<p>(a) Removal of at least 200 mm from the base of the pond; and</p> <p>(b) Isolate all pipework and connections between Emergency Pond 3 and the WWTP.</p>	<p>(i) Organic material and soil removed from the base of the pond must be disposed of at an appropriate facility;</p> <p>(ii) The Licence Holder must develop and implement a sampling and analysis plan<sup>1</sup> to adequately validate the soils below the base of the decommissioned Emergency Pond 3; and</p> <p>(iii) All decommissioned pipework must be hydraulically tested and deemed adequately isolated from the remaining WWTP infrastructure.</p>

Note 1: refer to Section 6 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on developing and undertaking soil investigations.

## Monitoring requirements

12. The Licence Holder must ensure that.
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
  - (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
  - (d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031;
  - (e) All soil samples and
  - (f) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in Table 7 or Table 8.
13. The Licence Holder must ensure that the cumulative volumetric flow rate of sewage inflow to and treated sewage from the Premises is continuously monitored and recorded at a minimum averaging period of monthly at the:
  - (a) sewage inflow to the Primary Pond;
  - (b) the Reuse Facilities; and
  - (c) the Broome North sewage facility.
14. The Licence Holder must monitor treated sewage for concentrations of the parameters listed in Table 7:
  - (a) at the corresponding sampling point;
  - (b) for each corresponding parameter in the corresponding units;
  - (c) at no less than the corresponding frequency; and
  - (d) for the corresponding averaging period.

15. The Licence Holder must monitor groundwater for concentrations of the parameters listed in Table 8:

- (a) at the corresponding sampling point;
- (b) for each corresponding parameter in the corresponding units;
- (c) at no less than the corresponding frequency; and
- (d) for the corresponding averaging periods.

**Table 7: Treated sewage discharge monitoring table.**

Sampling Point	Parameter	Units	Frequency	Averaging period
Discharge point M7 Broome WWTP Final Effluent as depicted in the process flow diagram in Schedule 1	pH <sup>1</sup>	-	Monthly	Spot Sample
	Ammonium (NH <sub>4</sub> -N)	mg/L		
	Nitrate + nitrite – nitrogen			
	Oil and grease			
	Total biochemical oxygen demand			
	Total dissolved solids			
	Total metals (copper)			
	Total nitrogen			
	Total phosphorus			
	Total suspended solids			
	<i>Escherichia coli</i>	cfu/100 mL		

Note 1: In-field non-NATA Accredited analysis permitted.

**Table 8: Groundwater monitoring table.**

Sampling Point	Parameter	Units	Frequency	Averaging period
2/17S; 2/17D; 2/04; 3/97; 6/13S; 6/13D; 12/17S; 12/17D; 3/04S; 18/17; 19/17; 20/17; 17/17S; 7/17S; 6/17S; 6/17D; 7/17D;	Standing water level <sup>1</sup>	mAHD; mBGL	Quarterly (December, March, June and September)	Spot Sample
	pH <sup>2</sup>	-		
	Electrical conductivity <sup>2</sup>	µS/cm		
	Redox potential	Eh		
	Ammonium (NH <sub>4</sub> -N)			
	Nitrate + nitrite – nitrogen			
	Total biochemical oxygen demand			
	Total dissolved solids			
	Total metals (aluminium, arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, potassium, zinc)			
	Total nitrogen			



Sampling Point	Parameter	Units	Frequency	Averaging period
4/13S; 4/13D; and 3/13D	Phenols			
	Phosphate			
	Total phosphorus			
	Total suspended solids			

Note 1: In-field non-NATA Accredited analysis permitted.

Note 2: In-field non-NATA Accredited analysis and NATA Accredited laboratory analysis required.

## Record keeping

- 16.** The Licence Holder must maintain accurate and auditable Books including the following records, information, reports and data required by this Licence:
- (a) the calculation of fees payable in respect of this Licence;
  - (b) the works conducted in accordance with Conditions 5 – 6 of this Licence;
  - (c) the maintenance of infrastructure required to ensure that it is kept in good working order in accordance with Conditions 7 – 9 of this Licence;
  - (d) monitoring undertaken in accordance with Conditions 13 – 15 of this Licence;
  - (e) complaints received under Condition 17 of this Licence; and
- In addition, the Books must:
- (f) be legible;
  - (g) if amended, be amended in such a way that the original and subsequent amendments remain legible and are capable of retrieval;
  - (h) be retained for at least 3 years from the date the Books were made; and
  - (i) be available to be produced to an Inspector or the CEO.
- 17.** The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:
- (a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
  - (b) the name and contact details of the complainant, if provided by the complainant;
  - (c) the date of the complaint; and
  - (d) the details and dates of the actions taken by the Licence Holder in response to the complaints.

## Reporting Works

- 18.** If Condition 6(d) applies, then the Licence Holder must provide the CEO with a list of departures that are certified as complying with Condition 6(d) at the same times and from the same suitably qualified professional engineer, as the certifications under Condition 21 are provided.

- 19.** The Licence Holder must submit a Construction Compliance and Quality Assurance Validation Report to the CEO, following the Works for each of the Secondary Pond and the Tertiary Pond specified in Condition 5 respectively.
- 20.** The Licence Holder must ensure that the Construction Compliance and Quality Assurance Validation Report required by Condition 19:
- (a)** is certified by a suitably qualified independent professional engineer that each item of Works specified in Column 1 of Table 3 with the specifications in Column 2 of Table 3 has been constructed and certified with no material defects;
  - (b)** contains as constructed plans for the Works and Sewage Treatment System; and
  - (c)** is signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person within the company.
- 21.** The Licence Holder must, within 90 days of completion of the decommissioning of Emergency Pond 3, submit to the CEO an environmental compliance report demonstrating compliance with Condition 11 and must include:
- (a)** a clear statement of the scope of work carried out;
  - (b)** A soil validation report that includes:
    - (i)** a description of the field methodologies employed;
    - (ii)** a figure depicting all soil validation sampling locations;
    - (iii)** a tabulated summary of soil validation sampling results, with all results being clearly referenced to laboratory certificates of analysis;
    - (iv)** an interpretive summary and assessment of the soil validation sampling results against relevant assessment levels for soil, as published in the Guideline Assessment and management of contaminated sites;
    - (v)** a summary of the field and laboratory quality assurance / quality control (QA/QC) program;
    - (vi)** copies of the field records and field QA/QC documentation; and
    - (vii)** an assessment of reliability of field procedures and laboratory results.
  - (c)** certification from a suitably qualified person authorised to represent the licence holder that works, as specified in Condition 11, have been undertaken in accordance with the relevant requirements specified in Table 6; and
  - (d)** be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Note: General guidance on report presentation can be found in the Department's *Guideline: Assessment and management of contaminated sites*.

## Reporting Operations

- 22.** The Licence Holder must submit to the CEO, no later than 1 October in each year an AACR indicating the extent to which the Licence Holder has complied with the Conditions in this Licence for the preceding Annual Period.

- 23.** The Licence Holder must submit to the CEO, no later than 1 October in each year an Environmental Report that contains requirements for the corresponding Condition specified in Table 9.

**Table 9: Annual Period environmental report requirements.**

Condition	Requirement
Condition 13	<p><b>(a)</b> a summary of all monthly sewage input/ output volumetric monitoring data for the Annual Period presented in table format; and</p> <p><b>(b)</b> a summary of any Waste accepted from a Carrier at the Premises for the Annual Period</p>
Condition 14	<p>A summary of all treated sewage discharge monitoring data for the Annual Period for all parameters:</p> <p><b>(a)</b> presented in table format for the Annual Period; and</p> <p><b>(b)</b> presented in graphical format, for trend analysis, to include at least the last four years of data where available.</p>
Condition 15	<p>A summary of all groundwater monitoring data for the Annual Period for all parameters:</p> <p><b>(a)</b> presented in table format for the Annual Period; and</p> <p><b>(b)</b> presented in graphical format, for trend analysis, to include at least the last ten years of data where available.</p>

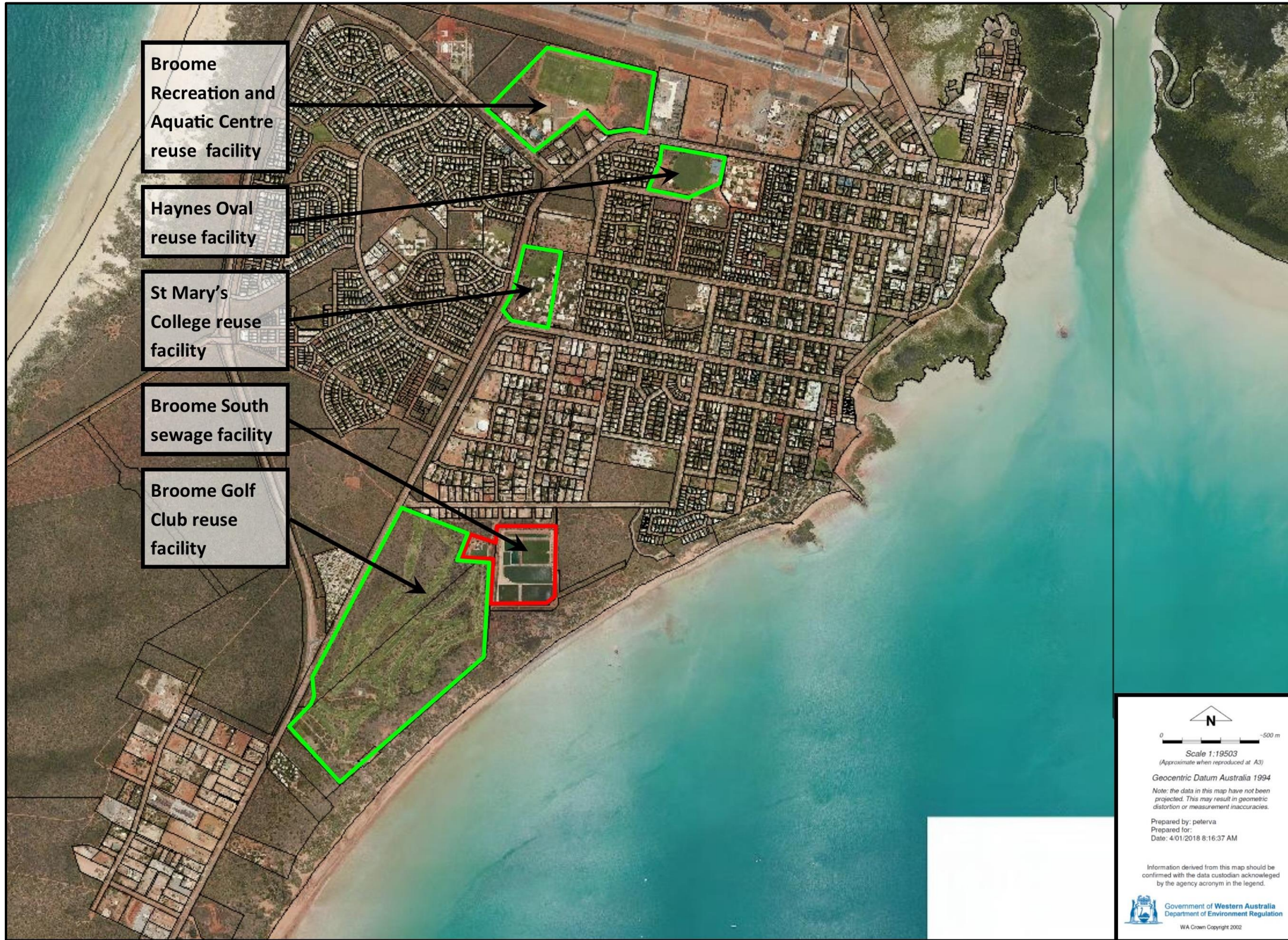
- 24.** The Licence Holder must comply with a Department Request, within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.



## Schedule 1: Figures

### Premises map - overview

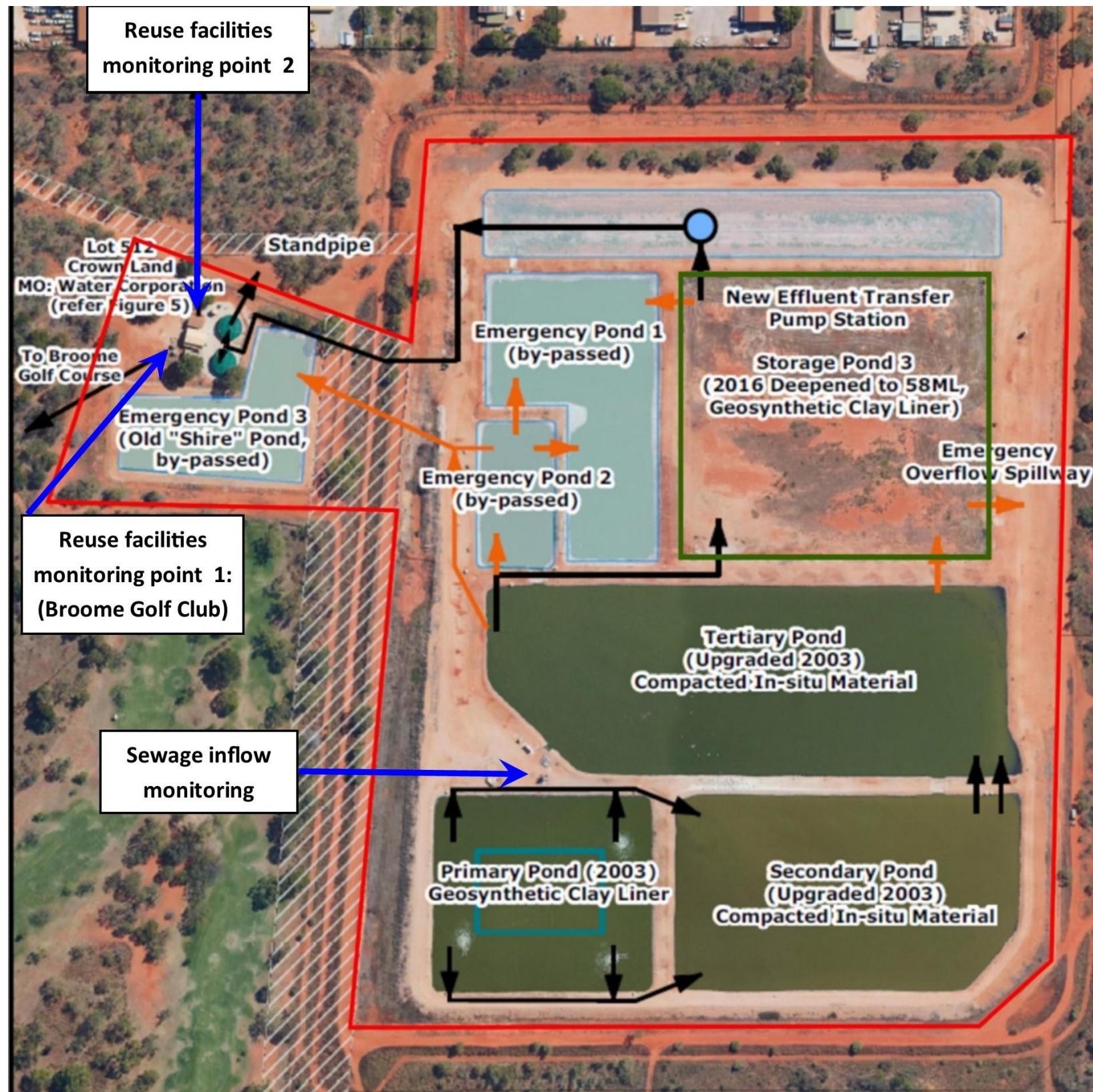
The Premises is shown in the Figure below. The red line depicts the boundary of the Prescribed Premises with the green lines depicting the boundaries of the Reuse Facilities.





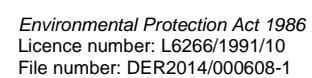
## Premises infrastructure map

The Premises infrastructure is depicted in the Figure below.





The monitoring points and process flow information is depicted in the Figure below.





## Premises map

The groundwater monitoring bore locations are depicted by the blue circles in the Figure below.



## Schedule 2: Primary Activities

At the time of assessment, Emissions and Discharges from the following Primary Activities were considered in the determination of the risk and related Conditions for the Premises. The Primary Activities are listed in Table 10.

**Table 10: Primary Activities**

Primary Activity	Premises production or design capacity
Category 54: Sewage facility: premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters.	2,000 m <sup>3</sup> day/ per annual period
Category 61: Liquid waste facility: Premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	1,000 m <sup>3</sup> per annual period

## Infrastructure and equipment

The Primary Activity infrastructure and equipment situated on the Premises is listed in Table 5 of the Licence.

## Site layout

The Primary Activity infrastructure and equipment is set out on the Premises in accordance with the site layout specified on the Premises map and Premises infrastructure map in Schedule 1.